MYSTRAN Compiling: Overall Notes

Instructions provided by Brian Esp (www.espcomposites.com and www.structruafea.com)

Options

There are various methods that can be used to compile MYSTRAN. This document discusses some of the advantages and disadvantages of each approach. *Note that there are corresponding PDF files (on the MYSTRAN forum - https://www.mystran.com/forums) that describe how to build with the different compilers.*

Code::Blocks + gFortran

- Default suggestion for developers
- Open source
- Windows and Linux
- Detailed documentation for how to compile MYSTRAN
- Code::Blocks is an IDE (a GUI approach to compiling)

CMake + gFortran + Make Utility

Alternate open source suggestion: Another option is to use CMake to create a Makefile. This is a "command line option" as opposed to the GUI approach with Code::Blocks. PDF instructions have been created and the required make files exist. Two approaches currently exists on the MYSTRAN forum. Option 2a is more current approach and Option 2b is an older approach. Option 2a is recommended and Option 2b may be considered for reference.

Visual Studio + Intel Fortran

- 32-bit and 64-bit Fortran compilers
- Visual Studio is free, but Intel Fortran is not free (though there is a 30 day trial)
- Windows only
- Instructions for how to compile with MYSTAN are on the forum. However, they are less thorough and not regularly updated. This is because the priority is to develop MYSTRAN with open source tools.